Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the present application.

Listing of Claims:

1. (Currently Amended) An apparatus for controlling downlink power of the complex cell in the centralized base station system based on remote radio frequency units, said base station system having a plurality of radio frequency units ~~unit~~ and a RAKE receiver connected to said plurality of radio frequency units, the apparatus comprising:

signal quality measuring means connected to the RAKE receiver, for measuring signal quality of an uplink channel between each radio frequency unit and the same user equipment;

average signal quality calculating means for calculating average signal quality of each uplink channel according to the measured signal quality; and

power control means for adjusting transmission power of the downlink channel corresponding to the uplink channel according to said average signal quality, so that the transmission power of the downlink channel corresponding to the uplink channel with a lower average signal quality is relatively lower.

2. (Original) The apparatus of claim 1, characterized in that said signal quality is signal intensity.

3. (Original) The apparatus of claim 1, characterized in that said signal quality is code channel power.

4. (Original) The apparatus of claim 1, characterized in that said signal quality is signal-interference ratio.

5. (Original) The apparatus of claim 1, characterized in that said average signal quality is calculated over a period of time such that the average path losses of uplink and downlink channels are substantially equal.

6. (Original) The apparatus of claim 1, wherein said base station system has a merging unit for merging downlink physical channels so as to be modulated by a downlink modulating unit, characterized in that said power control means further comprise means for controlling the merging unites proportion factor for other downlink physical channel inputs than a synchronous channel, so that the proportion factor of physical channel of the downlink channel having lower uplink average signal quality is relatively lower.

7. (Original) The apparatus of claim 6, characterized in that said means for controlling the proportion factor performs said control by performing normalizing calculation on the average signal quality.

8. (Original) The apparatus of claim 1, characterized in that said power control means further comprises selecting means for comparing each average signal quality with a predetermined threshold, so that the downlink channel corresponding to the uplink channel with average signal quality below or equal to the threshold has transmission power of 0.

9. (Original) The apparatus of claim 8, wherein said base station system has a merging unit for merging downlink physical channels so as to be modulated by a downlink modulating unit, characterized in that said power control means further comprise switching means for switching off the corresponding input of the downlink channel, determined by the selecting means as having transmission power of 0, to the merging unit.

10. (Currently Amended) A method for controlling downlink power of the complex cell in the centralized base station system based on remote radio frequency units, said base station system having a plurality of radio frequency units unit and a RAKE receiver connected to said plurality of radio frequency units, the method comprising:

measuring signal quality of an uplink channel between each radio frequency unit and the same user equipment according to the received signal measurement by the RAKE receiver;

calculating average signal quality of each uplink channel according to the measured signal quality; and

adjusting transmission power of the downlink channel corresponding to the uplink channel according to said average signal quality, so that the transmission power of the downlink channel corresponding to the uplink channel with a lower average signal quality is relatively lower.

11. (Original) The method of claim 10, characterized in that said signal quality is signal intensity.

12. (Original) The method of claim 10, characterized in that said signal quality is code channel power.

13. (Original) The method of claim 10, characterized in that said signal quality is signal-interference ratio.

14. (Original) The method of claim 10, characterized in that said calculating step comprise calculating the average signal quality over a period of time such that the average path losses of uplink and downlink channels are substantially equal.

15. (Original) The method of claim 10, wherein said base station system has a merging unit for merging downlink physical channels so as to be modulated by a downlink modulating unit, characterized in that said adjusting step further comprise controlling the merging unit's proportion factor for other downlink physical channel inputs than a synchronous channel, so that the proportion factor of physical channel of the downlink channel having lower uplink average signal quality is relatively lower.

16. (Original) The method of claim 15, characterized in that said step of controlling the proportion factor comprise performing normalizing calculation on the average signal quality.

17. (Original) The method of claim 10, characterized in that said adjusting step further comprises a selecting step of comparing each average signal quality with a predetermined threshold, so that the downlink channel corresponding to the uplink channel with average signal quality below or equal to the threshold has transmission power of 0.

18. (Original) The method of claim 17, wherein said base station system has a merging unit for merging downlink physical channels so as to be modulated by a downlink modulating unit, characterized in that said adjusting step further comprise a switching control step of switching off the corresponding input of the downlink channel, determined by the selecting step as having transmission power of 0, to the merging unit.